REMARKS

This responds to the first office action mailed August 26, 2004 in connection with the above identified patent application. Claims 1, 3 and 8-12 have been cancelled. Claims 2, 4 and 5-7 have been amended. Claims 2, 4, and 5-7 are still pending. Reconsideration and reexamination of the Application is respectfully requested.

NEW MATTER

The amendments to the claims do not add new subject matter. Indeed, such amendments are clearly supported by the original text. With regard to claim 7, all the added features directly derive from original claims 1 and 3.

Claim Rejections – 35 USC § 112

Claims 1-12 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter regarded as the invention. The term "which" used in claim 1 were considered not definite.

Original claim 1 has been cancelled and independent claim 7 has been amended to include the features expressed in original claim 1 without any indefinite term like "which". Claim 7 has been amended to be definite as required by 35 U.S.C. 112.

Claim Rejections – 35 USC § 102

Claims 1-3, 5-9, 11 and 12 were rejected under 35 U.S.C. 102 (b) as being anticipated by Blatt (3,811,622).

Moreover, claims 1, 2, 4, 5, 7, 8, 10 and 11 were rejected under 35 U.S.C.102 (b) as being anticipated by Lewis (1,992,490).

The application has been amended to overcome the rejections raised in the first office action. In particular, original claim 1, referring to an intercept valve for spray guns for water cleaner apparatus has been cancelled and original claim 7 referring to a spray gun has been properly amended to become the main claim of the Application.

Claim 7 refers now to a spray gun for water cleaner apparatus comprising an intercept valve (1). The intercept valve (1) comprises a main body (2) exhibiting an internal cavity (3) presenting an inlet opening (4) and an outlet opening (5). The inlet opening is attached to a tube (8) disposed upstream the valve (1) and the outlet opening (5) is attached to a tube (7) disposed downstream the valve (1). The tubes (7, 8) form a conduit for a fluid. The intercept valve (1) comprises a ball obturator (9) and an annular seating (10) arranged in the internal cavity (3). The ball obturator (9) rests against the annular seating (10) when the valve (1) is in a closed position. The ball obturator (9) is pushed against the annular seating (10) by a pressurised fluid in the valve (1). The annular seating (10) exhibits a central longitudinal axis defining a flow direction of the pressurised fluid through the annular seating (10). The intercept valve also comprises a pusher element (11) controlled by means for activating (12). The pusher element (11) exerts on the ball obturator (9) a thrust able to detach the ball obturator (9) from the annular seating (10) by changing the intercept valve (1) into an open position. The internal cavity (3) exhibits, upstream the annular seating (10), a containment chamber (3a) for the ball obturator (9). The containment chamber (3a) enables lateral displacements of the ball obturator (9) with respect to the flow direction of the fluid. The pusher element (11) is transversally oriented to the

flow direction of the fluid so that the thrust exerted on the ball obturator (9) moves the ball obturator (9) in a direction transversal to a central axis of the annular seating (10). **The pusher element (11) is arranged in contact with a surface zone of the ball obturator (9) comprised between a diametrically intersecting plane of the ball obturator (9), perpendicular to the central axis of the annular seating (10), and the annular seating (10). The thrust exerted by the pusher element (11) distances the pusher element (11) from the annular seating (10).**

Blatt (3,811,622) shows a spray gun comprising an intercept valve wherein the main body exhibits an internal cavity presenting an inlet opening and an outlet opening. The inlet opening is attached to a tube disposed upstream the valve and the outlet opening is attached to a tube disposed downstream the valve. The intercept valve comprises a ball obturator (25) and an annular seating defined in the internal cavity by the main body. The ball obturator (25) is maintained against the annular seating for closing the valve by the pressurised fluid in the valve. The annular seating exhibits a central longitudinal axis defining a flow direction of the pressurised fluid through the annular seating. The intercept valve also comprises a pusher element (47) controlled by means for activating (39). The pusher element (47) exerts on the ball obturator (25) a thrust able to detach the ball obturator (25) from the annular seating by changing the intercept valve into an open position. The internal cavity exhibits, upstream the annular seating, a containment chamber for the ball obturator (25). The containment chamber enables lateral displacements of the ball obturator (25) with respect to the flow direction of the fluid. The pusher element (47) is transversally oriented to the flow direction of the fluid so that the thrust exerted on the ball obturator (25) moves the ball obturator (25) in a direction transversal to a central axis of the

annular seating (10). The pusher element (11) is arranged in contact with a surface zone of the ball obturator (25) comprised between the annular seating and the outlet opening.

Blatt (3,811,622) does not show a pusher element arranged in contact with a surface zone of the ball obturator comprised between a diametrically intersecting plane of the ball obturator, perpendicular to the central axis of the annular seating, and the annular seating, but it only shows a pusher element (47) engaged on a surface zone disposed downstream the annular seating when the valve is in the closed condition.

Similarly, Lewis (1,992,490) shows a nozzle comprising an intercept valve wherein the main body (12) exhibits an internal cavity presenting an inlet opening and an outlet opening. The inlet opening is attached to a tube disposed upstream the valve and the outlet opening is attached to a tube disposed downstream the valve. The intercept valve comprises a ball obturator (17) and an annular seating defined in the internal cavity by the main body (12). The ball obturator (17) is maintained against the annular seating for closing the valve by the pressurised fluid in the valve. The annular seating exhibits a central longitudinal axis defining a flow direction of the pressurised fluid through the annular seating. The intercept valve also comprises a pusher element (21) controlled by means for activating (20a). The pusher element (21) exerts on the ball obturator (17) a thrust able to detach the ball obturator (17) from the annular seating by changing the intercept valve into an open position. The internal cavity exhibits, upstream the annular seating, a containment chamber for the ball obturator (17). The containment chamber enables lateral displacements of the ball obturator (25) with respect to the flow direction of the fluid. The pusher element (21) is transversally oriented to the flow direction of the fluid so that the thrust

exerted on the ball obturator (17) moves the ball obturator (17) in a direction transversal to a central axis of the annular seating. The pusher element (21) is arranged in contact with a surface zone of the ball obturator (17) comprised between the annular seating and the downstream tube.

Lewis (1,992,490) does not show a pusher element arranged in contact with a surface zone of the ball obturator comprised between a diametrically intersecting plane of the ball obturator, perpendicular to the central axis of the annular seating, and the annular seating. Lewis (1,992,490) only shows a pusher element (21) engaged on a surface zone disposed downstream the annular seating when the valve is in the closed condition as shown in figure 2.

Thus, Amended claim 7 differs both from Blatt (3,811,622) and from Lewis (1,992,490).

According to the other references listed and sent you with the information disclosure statement, Application according to amended claim 7 is also new.

Ginzler (4,273,310) refers to a device for blocking or releasing fluid flow. In particular, Ginzler (4,273,310) shows only one intercept valve comprising a main body presenting an internal cavity with an inlet opening and an outlet opening. The intercept valve comprises a obturator ball (1) and an annular seating (2, 3) against the ball (1) rests when the valve is closed by the pressurized flow of fluid. The intercept valve also comprises a pusher element (4) controlled by means for activating. The pusher element (4) is able to detach the ball (1) from the respective annular seating (2, 3) to open the valve. The internal cavity also exihibits a containment chamber for all the ball obturator (1) for enabling lateral displacements of the ball (1) with respect to the flow of fluid. The pusher element (4) is perpendicularly oriented with

respect to the flow direction of the fluid by for moving the ball obturator (17) in a direction transversal to a central axis of the annular seating. The pusher element (4) is arranged in contact with a surface zone of the ball obturator (17) coincident with a diametrically intersecting plane of the ball obturator (4), perpendicular to the central axis of the annular seating (2, 3) when the valve is open and comprised between the diametrically intersecting plane of the ball obturator (4) and the annular seating (2, 3) when the valve is closed.
Ginzler (4,273,310) does not disclose and show a spray gun for water cleaner apparatus as the one claimed in claim 7.

Son (4,667,349) discloses a water saving stopcock wherein its main body presents an internal cavity (4) with an inlet opening (5) and an outlet opening (6). The water saving stop cock also comprises a obturator ball (8) and an annular seating (7) against the obturator ball (8) rests when the valve is closed (figure 1) by the pressurized flow of fluid. The water saving stop cock comprises a pusher element (9) able to detach the obturator ball (8) from the respective annular seating (7) to open the valve. The internal cavity (4) enables lateral displacements of the ball obturator (8) with respect to the flow of fluid. The pusher element (9) is perpendicularly oriented with respect to the flow direction of the fluid and the ball obturator (8) is movable in a direction transversal to a central axis of the annular seating. The pusher element (9) is arranged in contact with a surface zone of the ball obturator (8) coincident with a diametrically intersecting plane of the ball obturator (4), perpendicular to the central axis of the annular seating (7) when the valve is closed.
Son (4,667,349) does not mention any kind of spray gun for water cleaners and does not disclose a pusher element arranged in contact with a surface zone of the ball obturator comprised between a diametrically intersecting plane of the ball obturator and the annular seating as claimed in claim 7.

Butzen (4,903,944) refers to a valve assembly wherein the pusher element (52) works on the ball obturator (50) **axially with respect to the flow of fluid**.

Butzen (4,903,944) does not show a valve wherein the pusher element is oriented transversally with respect to the flow of fluid but it teaches to dispose the pusher element oriented in the length of the flow of fluid which is oriented transversally to the longitudinal axis of the conduit (20). The pusher element (52) can open the valve only pushing the ball obturator (50) contrary to the flow of fluid.

EP 0 462 749 refers to a spray gun with an intercept valve rather similar to the valve shown in Butzen (4,903,944), i.e. having a pusher element (41b) able to work on the ball obturator (41a) axially with respect to the flow of fluid. Moreover, such valve also comprises a spring helping the fluid to maintain the ball obturator (41a) against the annular seating (45) when the valve is closed.

GB 22,214 refers to a nozzle substantially equal to the one disclosed and shown in Lewis (1,992,490).

None of the documents cited and used, according to the Examination of the present Application, and/or listed within the information disclosure statement, shows the features claimed in amended claim 7.

Therefore, Application according to amended claim 7, as well as the claims depending on claim 7, is novel over the art of record.

35 U.S.C. § 103

Applicant respectfully points out that the Application, according to amended claim 7 is also inventive over the art of record because such claim is based on a combination of features not obtainable by a combination of the prior art's teachings.

In particular, Applicant brings the Examiner attention on the most pertinent prior art's references, i.e. Blatt (3,811,622) and Ginzler (4,273,310).

Applicant respectfully points out that to establish a *prima facie* case of obviousness three basic criteria should be met.

First, there should be some suggestion or motivation, either in the references themselves or the knowledge generally available to one of ordinary skill in the art, to modify the reference teachings.

Both Blatt (3,811,622) and Ginzler (4,273,310) **fails to do that**. In fact, neither Blatt (3,811,622) nor Ginzler (4,273,310) suggest to modify the solutions disclosed in any other reference to obtain the application's claimed invention.

Second, there should be a reasonable expectation of success.

Third and finally the prior art references should teach all the claim limitations by considering that, however, the reasonable expectation of success should be found in the prior art and not based on applicant's disclosure.

It is clear that at least two of the three above criteria are not met with reference of amended claim 7.

Thus, it is sincerely believed that a skilled person in the art would not combine such documents to obtain the claimed solution.

It is also to be noted that, none of the other prior art documents cited and used during the examination procedure both alone and in combination with

one or more of the prior art's documents is able to suggest a provision like the one claimed.

Therefore the Application, according to claim 7 is inventive over the art of record.

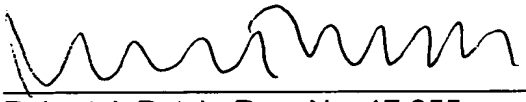
Conclusion

All matters having been addressed above and in view of the pending claims and remarks, applicant respectfully requests the entry of this amendment, the Examiner's reconsideration of the application, and the timely allowance of the pending claims.

Applicants' counsel remains ready to assist the Examiner in any way to facilitate and expedite the prosecution of this application.

Respectfully Submitted

YOUNG & THOMPSON



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